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RAW SEQUENCE LISTING

DATE: 06/05/2001

PATENT APPLICATION: US/09/804,733A

TIME: 13:00:38

Input Set : A:\Mtc661~1.txt

Output Set: C:\CRF3\06052001\I804733A.raw

3 <110> APPLICANT: Monsanto Company
 5 <120> TITLE OF INVENTION: RECOMBINANT PROTEINS CONTAINING REPEATING UNITS
 7 <130> FILE REFERENCE: MTC6614.2
 9 <140> CURRENT APPLICATION NUMBER: US 09/804,733A
 10 <141> CURRENT FILING DATE: 2001-03-13
 12 <150> PRIOR APPLICATION NUMBER: US 60/188,990
 13 <151> PRIOR FILING DATE: 2000-03-13
 15 <160> NUMBER OF SEQ ID NOS: 29
 17 <170> SOFTWARE: PatentIn version 3.0
 19 <210> SEQ ID NO: 1
 20 <211> LENGTH: 5
 21 <212> TYPE: PRT
 22 <213> ORGANISM: Euthynnus pelamis
 24 <220> FEATURE:
 25 <221> NAME/KEY: PEPTIDE
 26 <222> LOCATION: (1)..(5)
 28 <400> SEQUENCE: 1
 30 Leu Lys Pro Asn Met
 31 1 5
 33 <210> SEQ ID NO: 2
 34 <211> LENGTH: 4
 35 <212> TYPE: PRT
 36 <213> ORGANISM: Euthynnus pelamis
 38 <220> FEATURE:
 39 <221> NAME/KEY: PEPTIDE
 40 <222> LOCATION: (1)..(4)
 42 <400> SEQUENCE: 2
 44 Lys Pro Asn Met
 45 1
 47 <210> SEQ ID NO: 3
 48 <211> LENGTH: 4
 49 <212> TYPE: PRT
 50 <213> ORGANISM: Euthynnus pelamis
 52 <220> FEATURE:
 53 <221> NAME/KEY: PEPTIDE
 54 <222> LOCATION: (1)..(4)
 56 <400> SEQUENCE: 3
 58 Val Val Tyr Pro
 59 1
 61 <210> SEQ ID NO: 4
 62 <211> LENGTH: 15
 63 <212> TYPE: DNA
 C--> 64 <213> ORGANISM: Artificial
 66 <220> FEATURE:
 67 <221> NAME/KEY: misc_feature
 68 <222> LOCATION: (1)..(15)
 69 <223> OTHER INFORMATION: Degenerate sequence

ENTERED

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72 <220> FEATURE:
73 <221> NAME/KEY: misc_feature
74 <222> LOCATION: (1)..(15)
75 <223> OTHER INFORMATION: n=a, t, c or g; r=a or g; y=c or t
78 <400> SEQUENCE: 4
W--> 79 ctnaarccna ayatg 15
82 <210> SEQ ID NO: 5
83 <211> LENGTH: 60
84 <212> TYPE: DNA
C--> 85 <213> ORGANISM: Artificial
87 <220> FEATURE:
88 <221> NAME/KEY: misc_feature
89 <222> LOCATION: (1)..(60)
90 <223> OTHER INFORMATION: n=any nucleotide; r=a or g; y=c or t
93 <220> FEATURE:
94 <221> NAME/KEY: misc_feature
95 <222> LOCATION: (1)..(60)
96 <223> OTHER INFORMATION: Degenerate sequence
99 <400> SEQUENCE: 5
W--> 100 ctnaarccna ayatgctnaa rccnaayatg ctnaarccna ayatgctnaa rccnaayatg 60
103 <210> SEQ ID NO: 6
104 <211> LENGTH: 60
105 <212> TYPE: DNA
C--> 106 <213> ORGANISM: Artificial
108 <220> FEATURE:
109 <221> NAME/KEY: misc_feature
110 <222> LOCATION: (1)..(60)
111 <223> OTHER INFORMATION: n=any nucleotide, r=a or g, y=c or t
114 <220> FEATURE:
115 <221> NAME/KEY: misc_feature
116 <222> LOCATION: (1)..(60)
117 <223> OTHER INFORMATION: degenerate sequence
120 <400> SEQUENCE: 6
W--> 121 catrttnggy ttnagcatrt tnggyttnag catrttnggy ttnagcatrt tnggyttnag 60
124 <210> SEQ ID NO: 7
125 <211> LENGTH: 25
126 <212> TYPE: DNA
C--> 127 <213> ORGANISM: Artificial
129 <220> FEATURE:
130 <221> NAME/KEY: misc_feature
131 <222> LOCATION: (1)..(25)
132 <223> OTHER INFORMATION: Primer
135 <220> FEATURE:
136 <221> NAME/KEY: misc_feature
137 <222> LOCATION: (1)..(25)
138 <223> OTHER INFORMATION: n=any nucleotide; r=a or g; y=c or t
141 <400> SEQUENCE: 7
W--> 142 aaagaattcc tnaarccnaa yatgc 25
145 <210> SEQ ID NO: 8

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146 <211> LENGTH: 27
147 <212> TYPE: DNA
C--> 148 <213> ORGANISM: Artificial
150 <220> FEATURE:
151 <221> NAME/KEY: misc_feature
152 <222> LOCATION: (1)..(27)
153 <223> OTHER INFORMATION: Primer
156 <220> FEATURE:
157 <221> NAME/KEY: misc_feature
158 <222> LOCATION: (1)..(27)
159 <223> OTHER INFORMATION: n=any nucleotide; r=a or g; y=c or t
162 <400> SEQUENCE: 8
W--> 163 aaagcggccg ccatrttngg yttnagc 27
166 <210> SEQ ID NO: 9
167 <211> LENGTH: 20
168 <212> TYPE: DNA
C--> 169 <213> ORGANISM: Artificial
171 <220> FEATURE:
172 <221> NAME/KEY: misc_feature
173 <222> LOCATION: (1)..(20)
174 <223> OTHER INFORMATION: Primer
177 <400> SEQUENCE: 9
178 taatacgact cactataggg 20
181 <210> SEQ ID NO: 10
182 <211> LENGTH: 19
183 <212> TYPE: DNA
C--> 184 <213> ORGANISM: Artificial
186 <220> FEATURE:
187 <221> NAME/KEY: misc_feature
188 <222> LOCATION: (1)..(19)
189 <223> OTHER INFORMATION: Primer
192 <400> SEQUENCE: 10
193 cgatcaataa cgagtcgcc 19
196 <210> SEQ ID NO: 11
197 <211> LENGTH: 48
198 <212> TYPE: DNA
C--> 199 <213> ORGANISM: Artificial
201 <220> FEATURE:
202 <221> NAME/KEY: misc_feature
203 <222> LOCATION: (1)..(48)
204 <223> OTHER INFORMATION: n=any nucleotide; y=c or t
207 <220> FEATURE:
208 <221> NAME/KEY: misc_feature
209 <222> LOCATION: (1)..(48)
210 <223> OTHER INFORMATION: Degenerate sequence
213 <400> SEQUENCE: 11
W--> 214 gtngtntayc cngtngnta yccngtngtn tayccngtng tntayccn 48
217 <210> SEQ ID NO: 12
218 <211> LENGTH: 48

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219 <212> TYPE: DNA
C--> 220 <213> ORGANISM: Artificial
222 <220> FEATURE:
223 <221> NAME/KEY: misc_feature
224 <222> LOCATION: (1)..(48)
225 <223> OTHER INFORMATION: n=any nucleotide; r=a or g
228 <220> FEATURE:
229 <221> NAME/KEY: misc_feature
230 <222> LOCATION: (1)..(48)
231 <223> OTHER INFORMATION: Degenerate sequence
234 <400> SEQUENCE: 12
W--> 235 nggrrtanacn acnggrtana cnaenggrta nacnacnggr tanacnac 48
238 <210> SEQ ID NO: 13
239 <211> LENGTH: 33
240 <212> TYPE: DNA
C--> 241 <213> ORGANISM: Artificial
243 <220> FEATURE:
244 <221> NAME/KEY: misc_feature
245 <222> LOCATION: (1)..(33)
246 <223> OTHER INFORMATION: Forward primer
249 <220> FEATURE:
250 <221> NAME/KEY: misc_feature
251 <222> LOCATION: (1)..(33)
252 <223> OTHER INFORMATION: n=any nucleotide; y=c or t
255 <400> SEQUENCE: 13
W--> 256 aaaggatccg tngtntaycc ngngtntay ccn 33
259 <210> SEQ ID NO: 14
260 <211> LENGTH: 33
261 <212> TYPE: DNA
C--> 262 <213> ORGANISM: Artificial
264 <220> FEATURE:
265 <221> NAME/KEY: misc_feature
266 <222> LOCATION: (1)..(33)
267 <223> OTHER INFORMATION: Reverse primer
270 <220> FEATURE:
271 <221> NAME/KEY: misc_feature
272 <222> LOCATION: (1)..(33)
273 <223> OTHER INFORMATION: n=any nucleotide; r=a or g
276 <400> SEQUENCE: 14
W--> 277 cccaagcttn ggrrtanacna cnggrtanac nac 33
280 <210> SEQ ID NO: 15
281 <211> LENGTH: 45
282 <212> TYPE: DNA
C--> 283 <213> ORGANISM: Artificial
285 <220> FEATURE:
286 <221> NAME/KEY: misc_feature
287 <222> LOCATION: (1)..(45)
288 <223> OTHER INFORMATION: n=any nucleotide
291 <220> FEATURE:

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292 <221> NAME/KEY: misc_feature
293 <222> LOCATION: (1)..(45)
294 <223> OTHER INFORMATION: Degenerate sequence
297 <400> SEQUENCE: 15
W--> 298 gtnccncng tncncncngt nccncngtn ccncngtnc cnccn 45
301 <210> SEQ ID NO: 16
302 <211> LENGTH: 45
303 <212> TYPE: DNA
C--> 304 <213> ORGANISM: Artificial
306 <220> FEATURE:
307 <221> NAME/KEY: misc_feature
308 <222> LOCATION: (1)..(45)
309 <223> OTHER INFORMATION: n=any nucleotide
312 <220> FEATURE:
313 <221> NAME/KEY: misc_feature
314 <222> LOCATION: (1)..(45)
315 <223> OTHER INFORMATION: Degenerate sequence
318 <400> SEQUENCE: 16
W--> 319 ngnggnacn gnggnacng gnggnacngg nggnacnggn ggnac 45
322 <210> SEQ ID NO: 17
323 <211> LENGTH: 36
324 <212> TYPE: DNA
C--> 325 <213> ORGANISM: Artificial
327 <220> FEATURE:
328 <221> NAME/KEY: misc_feature
329 <222> LOCATION: (1)..(36)
330 <223> OTHER INFORMATION: Forward primer
333 <220> FEATURE:
334 <221> NAME/KEY: misc_feature
335 <222> LOCATION: (1)..(36)
336 <223> OTHER INFORMATION: n=any nucleotide
339 <400> SEQUENCE: 17
W--> 340 aaaggatccg tncncncngt nccncngtn ccnccn 36
343 <210> SEQ ID NO: 18
344 <211> LENGTH: 36
345 <212> TYPE: DNA
C--> 346 <213> ORGANISM: Artificial
348 <220> FEATURE:
349 <221> NAME/KEY: misc_feature
350 <222> LOCATION: (1)..(36)
351 <223> OTHER INFORMATION: Reverse primer
354 <220> FEATURE:
355 <221> NAME/KEY: misc_feature
356 <222> LOCATION: (1)..(36)
357 <223> OTHER INFORMATION: n=any nucleotide
360 <400> SEQUENCE: 18
W--> 361 aataagcttn gnggnacng gnggnacngg nggnac 36
364 <210> SEQ ID NO: 19
365 <211> LENGTH: 8

```

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

DATE: 06/05/2001

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TIME: 13:00:39

Input Set : A:\Mtc661~1.txt

Output Set: C:\CRF3\06052001\I804733A.raw

L:64 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4
L:79 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:85 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
L:100 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:106 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
L:121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:127 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
L:142 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:148 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8
L:163 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:169 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:9
L:184 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10
L:199 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11
L:214 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:220 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12
L:235 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:241 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13
L:256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:262 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:14
L:277 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:283 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:15
L:298 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:304 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:16
L:319 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:325 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:17
L:340 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:346 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:18
L:361 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:367 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:19
L:383 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:20
L:398 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:404 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:21
L:419 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:425 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:22
L:440 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:446 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:23
L:461 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:463 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:469 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:24
L:485 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:25
L:500 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:502 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:508 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:26
L:523 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:525 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:531 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:27
L:546 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:548 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27

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L:554 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:28
L:569 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:571 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:577 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:29